SYSTEM AND METHOD FOR DATA DISTRIBUTION

ABSTRACT OF THE DISCLOSURE

A method of distributing files operates in a system having a master and a plurality of slaves, interconnected by a communications network. Each slave determines a current file length for each of a plurality of files and sends slave status information to the master, the slave status information including the current file length for each file. The master schedules copy operations based on the slave status information. The master stores bandwidth capability information indicating data transmission bandwidth capabilities for the resources required to transmit data between the slaves, and also stores bandwidth usage information indicating a total allocated bandwidth for each resource. For each schedule copy operation, an amount of data transmission bandwidth is allocated and the stored bandwidth usage information is updated accordingly. The master only schedules copy operations that do not cause the total allocated bandwidth of any resource to exceed the bandwidth capability of that resource.